KENWOOD

KDC-D301

CD-PLAYER

INSTRUCTION MANUAL

KENWOOD CORPORATION

B64-1957-00 (EN)

PC CH01

COMPACT disc DIGITAL AUDIO

English

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⚠Warning

⚠CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD CORPORATION
2967-3, ISHIKAWA-CHO,
HACHIOJI-SHI
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT CONFORMS TO DHHS REGULATIONS N0.21 CFR 1040. 10, CHAPTER 1, SUBCHAPTER J.

Location : Bottom Panel

FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE

This Class B digital apparatus complies with Canadian ICES-003.

⚠WARNING

To prevent injury or fire, take the following precautions:

- Insert the unit all the way in until it is fully locked in place. Otherwise it may fall out of place when jolted.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Make sure not to get your fingers caught between the faceplate and the unit.
- Be careful not to drop the unit or subject it to strong shock.
  The unit may break or crack because it contains glass parts.

⚠CAUTION

To prevent damage to the machine, take the following precautions:

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not open the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not set the removed faceplate or the faceplate case in areas exposed to direct sunlight, excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- To prevent deterioration, do not touch the terminals of the unit or faceplate with your fingers.
- Do not subject the faceplate to excessive shock, as it is a piece of precision equipment.
- Do not place any object between the faceplate and the unit.
- During installation, do not use any screws except for the ones provided. The use of improper screws might result in damage to the main unit.

⚠CAUTION

Do Not Load 3-in. CDs in the CD slot

If you try to load a 3 in. CD with its adapter into the unit, the adapter might separate from the CD and damage the unit.

IMPORTANT INFORMATION

This unit is NOT designed to be connected directly to control units that are manufactured and sold before 1994. If used with such units, an optional CA-SD200 (sold separately) must be used.

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THIS UNIT AND CONTROL UNIT.

English

Safety precautions

Cleaning the Faceplate Terminals

If the terminals on the unit or faceplate get dirty, wipe them with a dry, soft cloth.

Cleaning the Unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe neutral detergent off.

⚠CAUTION

Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erases characters.

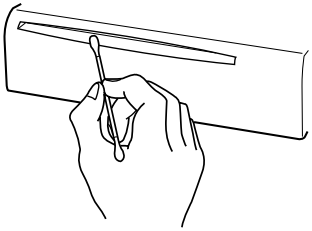
The marking of products using lasers (Except for some areas)

CLASS 1
LASER PRODUCT

The label is attached to the chassis/case and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

Cleaning the CD Slot

As dust can accumulate in the CD slot, clean it occasionally. Your CDs can get scratched if you put them in a dusty CD slot.



Lens Fogging

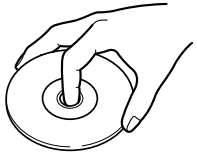
Right after you turn on the car heater in cold weather, dew or condensation may form on the lens in the CD player of the unit. Called lens fogging, CDs may be impossible to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a whilst, consult your Kenwood dealer.

Handling Compact discs

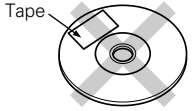
Playing a CD that is dirty, scratched or warped can cause the sound to skip and the unit to operate incorrectly, resulting in worsened sound quality. Take the following precautions to prevent your CDs from getting scratched or damaged.

Handling CDs

- Do not touch the recorded side of the CD (the side opposite the label) when holding it.



- The reflective film on a CD-R or a CD-RW is more fragile than that on an ordinary music CD, and may peel off if scratched. Fingerprints on a CD-R or CD-RW are also more likely to cause skipping when the disc is played. For these reasons, handle the disc very carefully. Detailed handling instructions will appear on the CD-R or CD-RW package: read this information carefully before using the disc.
- Do not stick tape on either side of the CD.

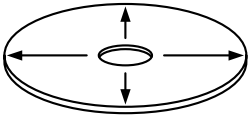


Storing CDs

- Do not store CDs in areas exposed to direct sunlight (such as a car seat or the dashboard) or other hot places. A CD-R or CD-RW is more susceptible than a music CD to damage from high temperatures and humidity, and in some cases, may become unusable if left in the car for long periods of time.
- Remove CDs from the unit when not listening to them for a while, and put them back in their cases. Do not pile up CDs that are removed from their cases or prop them against something.

Cleaning CDs

If a CD has gotten dirty, wipe it off gently using a commercially available cleaning cloth or a soft cotton cloth, starting from the center of the disc and moving outward. Do not clean CDs with conventional record cleaners, anti-static formulas, or chemicals such as paint thinner or benzene.

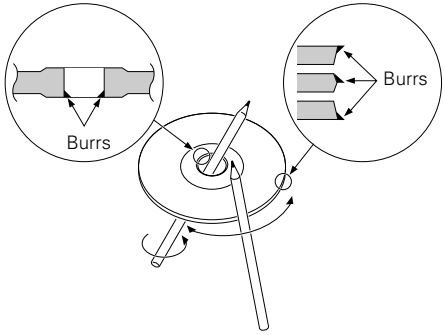


Do Not Load CD Accessories

Do not use commercially available CD accessories that can be loaded into the CD slot, such as stabilizers, protective sheets, or CD cleaning discs, since they can cause the unit to malfunction.

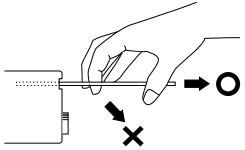
Checking New CDs for Burrs

When playing a new CD for the first time, check that there are not any burrs stuck to the perimeter of the disc or in the central hole. CDs with burrs stuck on them may not load properly or may skip while playing. Remove burrs using a ballpoint pen or a similar utensil.



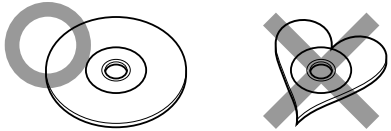
Removing the CD

Only remove the CD from the machine in a horizontal direction, holding it flat. You may damage the surface of the CD if you try pulling it down as it ejects.



Do Not Use Special Shape CDs

- Be sure to use round shape CDs only for this unit and do not use any special shape CDs. Use of special shape CDs may cause the unit to malfunction.



- Be sure to use CDs with disc mark only for this unit.

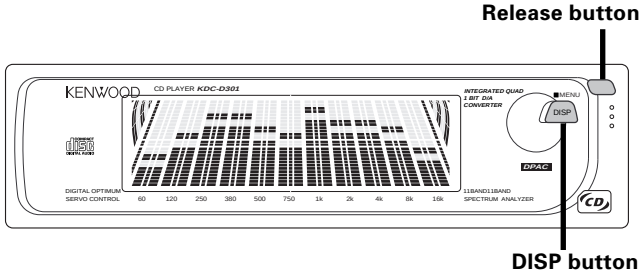
- CD-Rs and CD-RWs which have not undergone finalization processing cannot be played. (For more information on finalization processing, refer to the manual for your CD-R/CD-RW writing software or CD-R/CD-RW recorder.) Additionally, depending on the recording status, it may prove impossible to play certain CDs recorded on CD-R or CD-RW.

Do Not Use CDs with Sticker on the Labeled Side

Do not use the CD with the label sticker stuck on it.
Using such a CD may cause the CD to be deformed and the sticker to peel off, resulting in malfunction of the unit.

Operations

Buttons and Display



Setting of the O-N switch will be required depending on the Centre unit that is to be connected. (See Page 10.)
The operations you perform and the resultant operation of the unit will differ depending on the setting of the O-N switch. Please see the appropriate description of operations for the "O" or "N" switch setting.

Playing CDs

NOTE

The various CD operations are performed with the Centre unit. For information about the operation method, please see the Centre unit instruction manual.

▲CAUTION

- When inserting a CD, make sure the CD has been completely drawn in before pushing back the faceplate. Failing to do so might scratch the CD.
- Do not attempt to insert a CD into the slot if another one is already there.
- The unit can only play 12 cm (5 in). CDs. If you insert a 8 cm (3 in). CD, it will get stuck inside and can cause the unit to malfunction.

Operation for "N" Setting:

1 A press of the release button causes the faceplate to drop to the front, thereby exposing the CD slot.

2 Holding the CD with the labeled side facing up, insert it in the slot. The CD will start playing.

3 Push back on the right side of the faceplate with your hand until it locks.

NOTE

- Select "CD2" when this unit is connected to the CD receiver.
- Selection of the "CD" mode when a CD has not been loaded results in the display of "EJECT" or "E-01".
- For centre units brought on to the market from 1999 onwards, it is not possible to switch to the CD mode unless a CD has already been inserted.

Operation for "O" Setting:

1 A press of the release button causes the faceplate to drop to the front, thereby exposing the CD slot.

2 Holding the CD with the labeled side facing up, insert it in the slot.

3 Set the source mode of the centre unit to the "DISC" mode. CD play will begin.

NOTE

- Depending on the unit that is connected, "DISC-1" or "DISC-2" will be displayed.
- Selection of the "DISC" mode when a CD has not been loaded results in the display of "EJECT" or "E-01".
- Setting the source mode of the Centre unit to a setting other than disc changer mode will cause the indicators and button illumination of this unit to be switched off, but the CD loading/eject operation will still be possible.
- To allow the Centre unit to recognize this unit as a disc changer, disc switching operations such as the following are not permitted: disc search and disc repeat, disc name preset play, etc.

Switching Spectrum Analyzer Display

You can select the display to enjoy sounds with eyes.

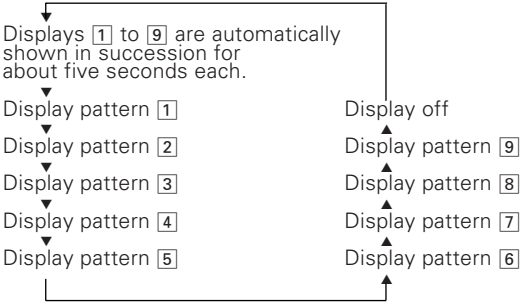
Operation for "N" Setting:

Each time you press the DISP button, the spectrum analyzer display switches as following table;

Operation for "O" Setting:

1 Selecting CD play source mode.

2 Each time you press the DISP button, the spectrum analyzer display switches as follows;



Presetting Disc Names

NOTE

Depending on the centre unit, the number of characters and/or the number of discs that can be preset may differ, or operations may not be possible.

Operation for "N" Setting:

This unit permits up to 12 characters to be used for disc name presetting with as many as 40 discs.
The disc name will be displayed when the disc name has been preset to any of the connected units.

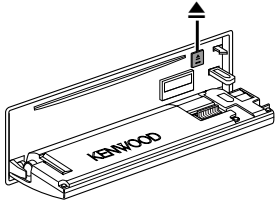
Operation for "O" Setting:

This unit permits up to 12 characters to be used for disc name presetting with as many as 40 discs.
The characters that can be entered are "A to Z, 0 to 9, []/+-*=<>".
The disc name will be displayed when a CD that has been disc name preset to this unit is played by this unit.

Operations

Eject

A press of the ⏏ button stops the CD play and ejects the CD.



NOTE

When you load a CD and eject it right away, the next time you try to insert the CD may not load. In such a situation, take the CD out for a moment and then reinsert it.

Display Level Adjustment

You can adjust the spectrum analyzer level.

1. Selecting CD play source mode.
2. Press the DISP button for at least one second.
3. Press either the ►►I or I◄◄ button on the centre unit.
   Press the ►►I button: Level increased.
   Press the I◄◄ button: Level decreased.
   (by 11 steps)

Ending the display level adjustment mode:

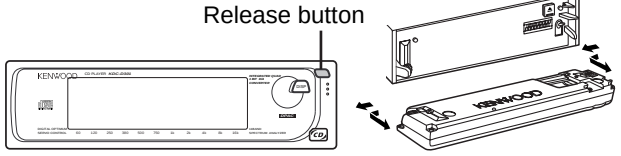
Press the DISP button.

Theft Deterrent Faceplate

The faceplate of the unit can be detached and taken with you, helping to deter theft.

Removing Faceplate:

Press the release button and drop open the faceplate.
In its dropped condition, whilst drawing the faceplate to one side, pull it to the front and remove it.



NOTE

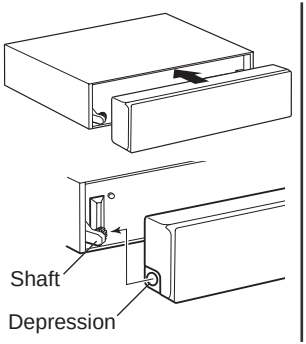
- If the controls remain untouched for a period of 5 minutes or more after the panel has dropped open or been removed, the disc will automatically stop playing. (A warning beep starts sounding 30 seconds before play stops automatically.)
- The faceplate is a precision piece of equipment and can be damaged by shocks or jolts. For that reason, keep the faceplate in its special storage case whilst detached.
- Do not expose the faceplate or its storage case to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

Reattaching Faceplate:

Hold the faceplate so that the operation face faces the front toward you and press until it locks. The faceplate will be set and the unit will be operational.

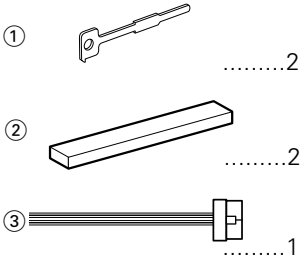
NOTE

When there is difficulty in setting the faceplate, align the depression on the left side of the faceplate with the shaft of the unit, then lock.

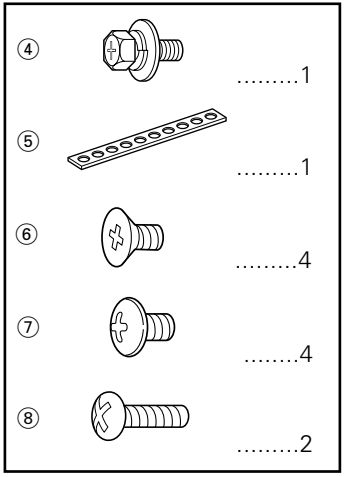


Accessories

External view **..... Number of items**



External view **..... Number of items**



North & South America sales area only.

⚠CAUTION

The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped with the unit, as shown above.

English

Installation Procedure

The O-N switch should be set according to the Centre unit in use as well as to the connected models.

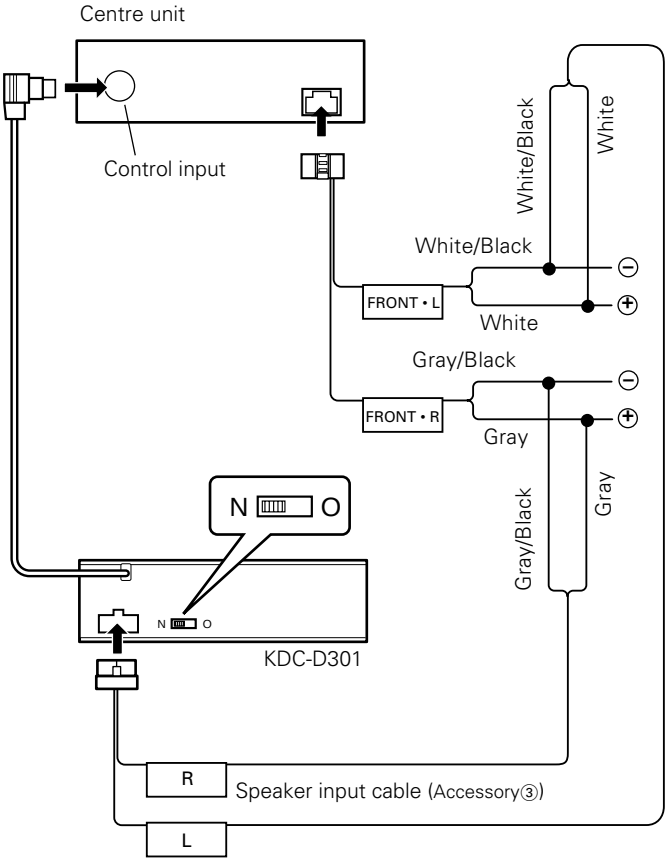
When the centre unit is compatible with the "N"-operation, set the O-N switch to "N". When it is not compatible with the "N"-operation, set the O-N switch to "O" because the operation is not available. The initial setting of the switch is "N".

1. To prevent a short circuit, remove the key from the ignition and disconnect the ⊖ battery.
2. Set the O-N switch of this unit to suit the centre unit.
3. Connect the speaker input cable to the front speaker cable of the wiring hernees of the centre unit.
4. Connect the control cable to the control connector.
5. Install the unit in your car.
6. Reconnect the ⊖ battery.
7. Press the reset button on the centre unit.

⚠CAUTION

- Do not connect the changer control cable while the centre unit is turned ON.
- Be sure to press the reset button after installation.
- Whether the centre unit in use is compatible with the "N"-operation or not can be identified by referring to its instruction manual (description of the disc control mode, etc.).
- If you use the changer switching unit, see the instruction manual for the KCA-S210A included in the unit. Set the O-N switch on the KCA-S200 to "O."
- Do not let unconnected wires or terminals touch metal on the car or anything else conducting electricity. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Mount the unit so that the mounting angle is 30° or less.

Connections

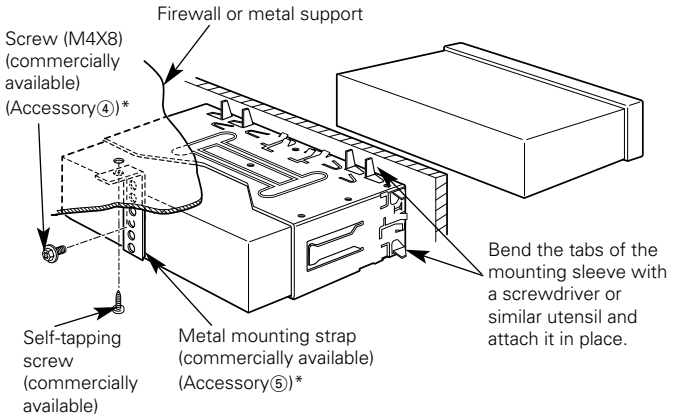


⚠CAUTION

If the speaker input cable is not connected, or connected wrongly, the spectrum analyzer will not be displayed.

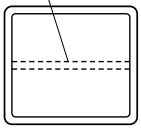
■ *Installation*

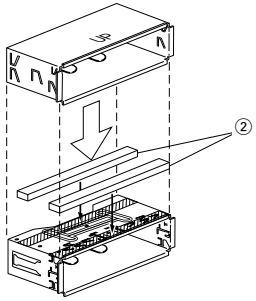
*…North & South America sales area only.


Firewall or metal support
Screw (M4X8) (commercially available) (Accessory④)*
Bend the tabs of the mounting sleeve with a screwdriver or similar utensil and attach it in place.
Self-tapping screw (commercially available)
Metal mounting strap (commercially available) (Accessory⑤)*

On cars where there is no compartment in the centre for installing a car audio unit:
Use the spacer ② to affix the centre unit sleeve and the sleeve attached to the main unit in such a way that they are correctly aligned both depthwise and horizontally.

On cars lacking a centre compartment





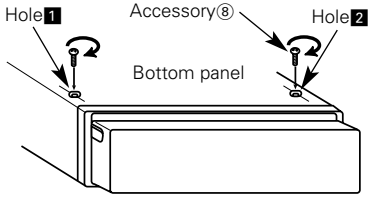
■ *Screwing the Faceplate on the Unit*

(North & South America sales area only.)

If you want to fasten the faceplate to the main unit so that it does not fall off, insert the provided screw (ø2.6 × 12 mm) in the holes as follows.

1 Insert one of the provided screws into hole**1** so that the screw is perpendicular to the bottom panel of the unit.

2 Similarly, insert another provided screw into hole**2**.



Ensure that the faceplate is fixed firmly before operating this unit.

⚠CAUTION

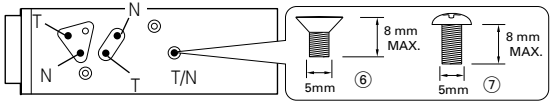
Never insert the taptite screws (ø2.6 × 12 mm) in any other screw holes than the one specified. If you insert it in another hole, it will contact and may cause damage to the mechanical parts inside the unit.

■ *Installing in Japanese-Made Cars*

(North & South America sales area only.)

1 Refer to the section "Removing the hard rubber frame (P.12)" and then remove the hard rubber frame.

2 Align the holes in the unit (two locations on each side) with the vehicle mounting blacket and secure the unit with the accessory screws.



T: Toyota cars
N: Nissan cars

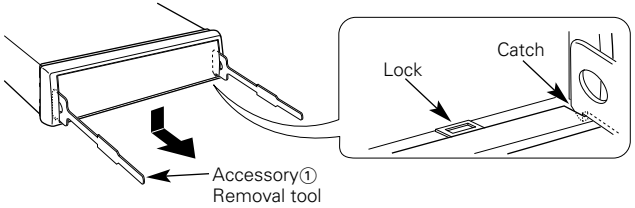
Accessory⑥...for Nissan car
Accessory⑦ ...for Toyota car

⚠CAUTION

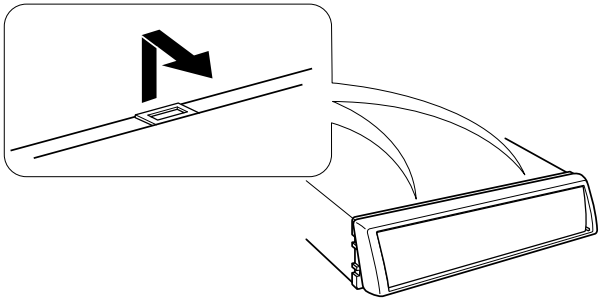
- During installation, do not use any screws except for those provided. The use of different screws might result in damage to the main unit.
- Damage may occur if a screwdriver or similar tool is used with excessive force during the installations.

■ *Removing the hard rubber frame*

1 Engage the catch pins on the removal tool and remove the two locks on the lower level.
Lower the frame and pull it forward as shown in the figure.



2 When the lower level is removed, remove the upper two locations.



NOTE

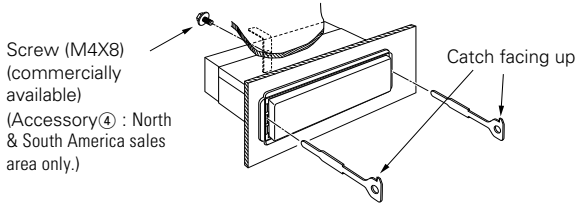
The frame can be removed from the top side in the same manner.

■ *Removing the Unit*

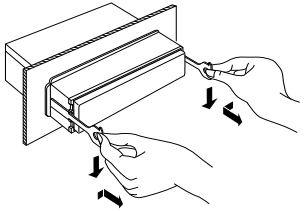
1 Refer to the section "Removing the hard rubber frame" and then remove the hard rubber frame.

2 Remove the Hex-head screw with integral washer (M4×8) on the back panel.

3 Insert the two removal tools deeply into the slots on each side, as shown.



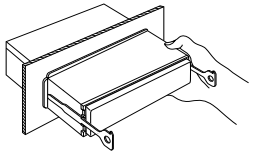
4 Lower the removal tool toward the bottom, and pull out the unit halfway whilst pressing towards the inside.



▲CAUTION

Be careful to avoid injury from the catch pins on the removal tool.

5 Pull the unit all the way out with your hands, being careful not to drop it.



Troubleshooting Guide

What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The disc control mode cannot be selected.	No cable has been connected to the disc changer input terminal on the unit.	Connect the control cable to the disc changer input terminal on the centre unit.
	No CD has been inserted.	For centre units brought on to the market from 1999 onwards, it is not possible to switch to the CD mode unless a CD has already been inserted.
No sound can be heard, or the volume is low.	Attenuator is turned on.	Turn off Attenuator.
	The fader or balance settings are set all the way to one side.	Reset the fader or balance settings.
	5 minutes have elapsed since the panel dropped open.	When 5 minutes have elapsed since the panel dropped open, the disc will automatically stop playing.
The spectrum analyzer is not displayed.	The speaker input cable is not connected.	Refer to the "Connections" section, and connect the cable.
	The fader setting has been adjusted to the rear side.	Adjust the fader control on the centre unit to the centre position.
	The analyzer display level has been set too low.	Adjust it to a higher level.
	The volume is too low.	Raise the volume, or alternatively, adjust the analyzer display level to a higher level.
Nothing happens when the buttons are pressed.	The computer chip in the unit is not functioning normally.	Press the reset button on the centre unit.
A CD ejects as soon as it is loaded.	The CD is upside-down.	Load the CD with the labeled side up.
	The CD is quite dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 5).
The sound skips on a CD.	The CD is scratched or dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 5).
A track will not play.	Random play has been selected.	Turn off random play.
The system will not enter the Menu mode.	The system is not in CD play mode.	If the main unit is not in CD play mode, it will not go into the Menu mode.
Cannot play CD-R or CD-RW	Finalization processing is not being conducted for CD-R/CD-RW.	Conduct finalization processing with CD recorder.

Troubleshooting Guide

The following messages are displayed on the centre unit when certain problems are occurring in your system. Take the recommended actions.

E-01 EJECT	No CD in the unit. ⇨Insert the CD.
NO PANEL E-30	The faceplate of this unit has been removed. ⇨Replace it.
E-04	The CD is quite dirty. The CD is upside-down. The CD is scratched a lot. ⇨Clean the CD and load it correctly.
E-99 Mecha Error	The unit is malfunctioning for some reason. ⇨Press the reset button on the centre unit. If the "E- 99"/"Mecha Error" code does not disappear, consult your nearest service centre.
E-0d HOLD	The protective circuit in the unit activates when the temperature inside the CD player exceeds 60°C (140°F), stopping all operation. ⇨Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60°C (140°F), the disc will start playing again.

Specifications

Specifications subject to change without notice.

CD player section

Laser diode	GaAlAs (λ=780 nm)
Digital filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle speed	500 – 200 rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency response (±1 dB)	5 Hz – 20 kHz
Total harmonic distortion (1 kHz)	0.01 %
Signal to Noise ratio	94 dB (1 kHz)
Dynamic range	94 dB
Channel separation	85 dB

General

Operating voltage	14.4 V (11 – 16 V allowable)
Current consumption	0.8 A
Installation size (W × H × D)	180 × 50 × 145 mm 7-1/16 × 1-15/16 × 5-3/4 in.
Weight	2.9 Lbs (1.3 kg)

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